



UNITED STATES PATENT AND TRADEMARK OFFICE

clo

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,248	04/09/2001	Patrick M. McCartney	89.0469	7390

7590 03/04/2004

Schlumberger Technology Corporation,
Schlumberger Reservoir Completions
14910 Airline Road
P.O. Box 1590
Rosharon, TX 77583-1590

EXAMINER

TYLER, CHERYL JACKSON

ART UNIT	PAPER NUMBER
----------	--------------

3746

DATE MAILED: 03/04/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,248

Applicant(s)

MCCARTNEY, PATRICK M.

Examiner

Cheryl J. Tyler

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 17-21, 23-27 and 29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 4-11, 17-21, 23-27 and 29 is/are allowed.
6) ☒ Claim(s) 1-3 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (3,975,117) in view of Parmeter et al. (5,828,149). Carter teaches a large casing 11 (corresponding to the claimed motor housing); a shaft 33 disposed within the casing; anti-friction ball bearing assembly 34, 47 (corresponding to a plurality of wear surfaces) that support the shaft; an inducer impeller pump 37 (corresponding to the lubricant pump) disposed within the casing at axial end thereof; central bore 64 (corresponding to the claimed conduit); a stator 31 disposed within the casing; and a rotor 32 rotatably mounted within the stator and mounted on the shaft. Carter teaches that "the inducer impeller 37 suspended on the bottom of the motor shaft 33 is rotated so that its vanes 39 will induce an upward flow of the fluid through the annular passage 24 between the motor housing 17 and the surrounding casing 14. The vanes 18 in this passage 24 will diffuse rotation of the fluid created by the rotating vanes 39 to axial flow. The axially flowing fluid passes through the inwardly converging passages 25 provided in the cap 16 to inlet 26 of the first pump stage where the fluid enters the eye of the shrouded impeller 53 ... Some of the fluid from the pumping chambers 27 will flow between the adjacent impellers and the overlying walls 83 of the cup members 82 into the chambers

86 which communicate with the bores 64 in the motor shaft 33 through the passages 6 and 87. This fluid is discharge from the motor shaft bore 64 through the passages 65 in to the bottom of the motor housing 17 and can flood this motor housing to eventually leak through the bottom bearing 34 and the bearing bushing 45 back to the inducer to merge with the incoming fluid impelled by the inducer and thus, be recirculated back through the passage 24. Likewise, the bled-off fluid in the top of the motor housing 17 can flow through the bearing 47 and bushing 62 back to the first stage pump inlet 26 to merge with the fluid from the passages 25. In this manner, the motor compartment is cooled and the bearings are lubricated" (column 5, line 44 - column 6, line 17).

With regards to the limitation that the lubricant comprises an oil, a recitation with respect to the material intended to be worked upon by a claimed apparatus does not impose any structural limitations upon the claimed apparatus which differentiates it from a prior art apparatus satisfying the structural limitations of the claims, as is the case here.

While Carter teaches most of the limitations of the claims, he does not explicitly teach that the conduit directly conducts lubricant from the lubricant pump to the plurality of wear surfaces. Parmeter et al. teach a lubricant pump (generally indicated as 57) having a shaft bore 53 (corresponding to the claimed conduit) with lateral passages 55 that "are preferably located in alignment with the radial bearings 35" (column 3, lines 4-5) which, in turn, directly supplies lubricant to the bearings. Parmeter et al. teach that it is desirable to directly lubricate the bearings in order to provide adequate cooling to prevent overheating of the bearings. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to use a conduit to directly lubricate the bearings, as taught by Parmeter et al., in the Carter invention in order to advantageously prevent the bearings from overheating and seizing, and thus, causing premature failure of the motor.

Allowable Subject Matter

3. Claims 4-11, 17-21, 23-27, and 29 are allowed.

Response to Arguments

4. Applicant's arguments, see page 7, lines 4-8, filed January 21, 2004, with respect to the rejection(s) of claim(s) 1-3 and 7-8 under Carter (3,975,117) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Parmeter et al. (5,828,149).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

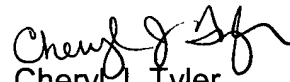
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl J. Tyler whose telephone number is 703-306-2772. The examiner can normally be reached on Monday-Thursday, 6:00 - 10:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on 703-308-2675. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cheryl J. Tyler
Primary Examiner
Art Unit 3746

CJT